

APPENDIX II

Server Data Structures

ServerId: LANAddress (* a unique 48 bit ID for this server *)
ClientLinks: SET of LinkNumber (* Link numbers of links to VML Clients *)
Type: OCTET; (* in first release only one type allowed *)
ClientAddresses: SET OF LANAddress (* 48 bit addresses of VML Clients *)

VlanList: LIST of VlanRecord

VlanRecord:

VlanId: OCTET;
VlanName: SimpleName;
VlanLinks: SET of LinkNumber; (* links in Vlan *)
ClientLinks: SET of LinkNumber; (* client links assigned to Vlan *)
State: (OFF, ON, TypeMismatch, IdMismatch);

ClientList: LIST of ClientRecord

ClientRecord:

LiveLinks: SET of LinkNumber; (* links that are up *)
ClientId: LANAddress (* unique ID of client *)

LinkArray: ARRAY[0..MaxLinks] of LinkRecord (*for ClientLinks only*)

LinkRecord:

ClientId: LANAddress (* unique ID of client *)
ConnectId: INTEGER; (* connection ID of transport connection *)
State: (INIT, REQ, ON) (*state of transport connection*)
SequenceNumber: INTEGER-64;
Buffer: (* buffer that stores update being currently sent *)
Retransmits: INTEGER (*number of times buffer has been retransmitted *)
PhaseIVaddress: LANAddress (*Phase IV address of client*)

ClientAddresses: SET of LANAddress

(*other client addresses*)

HuntGroupLink: LinkNumber;

(*hunt group, if any, that link is part of*)

Vlans: SEQUENCE of SmallVlanRecord;

(*list of Vlans assigned by client to this link*)